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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/518,392

07/25/2005

Satoshi Matsumoto

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EXAMINER

VERBITSKY, GAIL KAPLAN

ART UNIT

PAPER NUMBER

2855

MAIL DATE

DELIVERY MODE

04/03/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/518,392	MATSUMOTO ET AL.	
	Examiner	Art Unit	
	Gail Verbitsky	2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/10/07, 12/28/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 8-14 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2001071384 [hereinafter JP] in view of Black et al. (U.S. 5382770) [hereinafter Black] and EP 1063794 A2 [hereinafter EP].

JP discloses a device in the field of applicant's endeavor; teaches to weld two resin articles by using a laser, the first article 1 is non-absorbing light transmitting article.

JP does not teach the particular laser, as stated in claim 8 with the remaining limitations of claims 8-14.

Black discloses in Fig. 1 a device/ method in the field of applicant's endeavor comprising a laser, a blocking filter/ optical means (mirror) 18 diverging image component wavelengths through a filter 28 and an IR image lens 30 to form a thermal image/ temperature of the weld (entire col. 3 and col. 4, lines 1-23). The blocking filter is located between the laser and an object.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by JP so as to make a

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thermal image of the weld, as taught by Black, in order to provide the operator with a usable data of the quality of welding process.

EP teaches a semiconductor laser and a filter, however, the filter does not cut off oscillation wavelengths of the laser but stabilizes is by filtering reflected and transmitted lights.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by JP so as to replace the laser with a semiconductor laser, as taught by Watkins, because both of them are alternate types of laser usable in a welding process, and would perform the same function of producing required wavelengths signal, if one is replaced with another.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by JP so as to add a filter in order to stabilize the oscillation frequency, as already taught by EP, in order to obtain more accurate beam irradiating.

With respect to the particular wavelength range, i.e., 1500 nm to 2800 nm): transmitting the particular wavelength range, absent any criticality, is only considered to be the “preferred” or “optimum” or “preferred” optical range that a person having ordinary skill in the art at the time the invention was made would have been able to determine using routine experimentation based, among other things, on the desired light (i.e., visible, infrared, etc.). See in re Boesch, 205 USPQ 215 (CCPA 1980).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made the device capable to operate the particular transmitting wavelengths, so as to enable the device with a desired light/ electromagnetic radiation.

The method steps will be met during the normal operation of the device stated above.

Response to Arguments

Applicant's arguments with respect to claims 8-14 have been considered but are moot in view of the new ground(s) of rejection.

Applicant states that Black is capable to pass visible and IR lights (as opposed to the instant invention?). This argument is not persuasive because Applicant, in the originally filed claims, did not claim otherwise. Also, in response to Applicant's argument that the reference includes this additional feature not required by Applicant's invention, it must be noted that the reference discloses the invention as claimed. The fact that it discloses additional structure (feature) not claimed by Applicant is irrelevant.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 and not mentioned above disclose related devices and methods.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gail Verbitsky whose telephone number is 571/ 272-2253. The examiner can normally be reached on 7:30 to 4:00 ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on 571/ 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GKV

*Gail Verbitsky
Primary Patent Examiner, TC 2800*

March 25, 2008

/Gail Verbitsky/
Primary Examiner, Art Unit 2855

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